

CESIUM

Element Symbol: Cs Atomic Number: 55

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Cesium is a tiger with a soft heart.

It is the most reactive of the non-radioactive metals. It explodes fiercely on contact with water, reacts very quickly with air and has to be surrounded by a layer of inert gas and sealed in glass containers to stop it from burning in the oxygen in our atmosphere.

It is the softest metal – about as soft as butter, and it melts at a very low temperature – liquid cesium forms at 290 K, which is the second lowest of any metal after mercury.

Cesium is element number 55 and it shares Group 1 of the periodic table with the other highly reactive metals. Its high reactivity means that it is never found on earth in its pure form, always part of a salt or another mineral. It can be found in seawater and other mineral water samples. Easily the world's largest source of cesium is a mine next to Bernic Lake in Manitoba, Canada. Robert Bunsen (inventor of the Bunsen burner) and his co-worker Gustav Kirchoff in Germany were the first to discover the existence of cesium in 1860 in a sample of mineral water.

Cesium isn't a heavily used element. Salts of cesium form the basis for highly accurate atomic clocks, and they are also used as dense, environmentally friendly liquids for drilling in oil wells.

Provided by the element sponsor Frances Separovic

ARTISTS DESCRIPTION

This work was constructed from collaged elements, the resultant image etched onto a polymer plate, with overlaid information from open bite steel etching.

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